ENVIRONMENTAL
Fact Sheet

NEW HAMPSHIRE DEPARTMENT OF Environmental Services

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Dual Check Valve Devices for Residential Applications

The New Hampshire Department of Environmental Services strongly encourages the use of dual check valves for residential applications. The installation of dual check valve devices in all existing single family homes, as part of a meter installation/replacement program, is a practical policy for water purveyors. Dual check valves are consistent with the Drinking Water and Groundwater Bureau's (DWGB) policy of contamination containment at the water service connection. The risks from a single family home include sprinkler systems with chemicals, rust inhibitors and antifreeze added to home furnace boilers, and herbicides and pesticides applied with hand-held aspirators. The dual check valve devices being installed should meet or exceed the ANSI/ASSE Standard 1024 for dual check valve-type backflow preventers.

There is a myriad of chemicals that today's homeowners have access to and use each day, which could cause contamination to a public water supply system. This being the case, an extra barrier for protection against backflow and back-siphonage is completely appropriate.

Incidences of back-siphonage contamination due to a cross-connection include film developing chemicals, sprinkler system antifreeze, and improperly handled pesticides. These have been documented in many communities with public water supply systems without an appropriate cross-connection control program for residents. The installation of dual check valves is a simple and relatively inexpensive solution to the residential cross-connection problem. Although these devices are non-testable, they can provide an extra line of protection against accidental contamination of a public water supply system.

In cases where hot water systems have used the water distribution system for thermal expansion, the introduction of a dual check valve device will also require a pressure relief valve. The International Plumbing Code should also be consulted for additional information regarding thermal expansion problems.

Every water purveyor has an obligation to take reasonable measures to ensure a safe, potable water supply. Dual check valves provide a reasonable and cost-effective means to protect a public water supply system from contamination by residential backflow.

For Additional Information
Please contact the Drinking Water and Groundwater Bureau at (603) 271-2513 or dwgbinfo@des.nh.gov or visit our website at www.des.nh.gov/dwgbwww.des.nh.gov/dwgb